

**PART 70 MINOR SOURCE MODIFICATION  
OFFICE OF AIR QUALITY  
and GARY DEPARTMENT OF  
ENVIRONMENTAL AFFAIRS**

**BP Amoco Oil Company - Whiting Refinery  
2815 Indianapolis Boulevard  
Whiting, Indiana 46394**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 089-14239-00003	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 11, 2001

## TABLE OF CONTENTS

<b>SECTION A</b>	<b>SOURCE SUMMARY</b> .....	3
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.3	Part 70 Permit Applicability [326 IAC 2-7-2]	
<b>SECTION B</b>	<b>GENERAL CONSTRUCTION CONDITIONS</b> .....	4
B.1	Definitions [326 IAC 2-7-1]	
B.2	Effective Date of the Permit [IC13-15-5-3]	
B.3	Local Agency Requirement	
<b>SECTION C</b>	<b>GENERAL OPERATION CONDITIONS</b> .....	5
C.1	Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]	
C.2	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]	
C.3	Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]	
C.4	Opacity [326 IAC 5-1]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Fugitive Dust Emissions [326 IAC 6-1-11.1]	
C.7	Operation of Equipment [326 IAC 2-7-6(6)]	
	<b>Compliance Requirements [326 IAC 2-1.1-11]</b>	
C.8	Compliance Requirements [326 IAC 2-1.1-11]	
	<b>Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]</b>	
C.9	Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	
C.10	Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]	
C.11	Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	
	<b>Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]</b>	
C.12	Emergency Provisions [326 IAC 2-7-16]	
C.13	Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]	
	<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b>	
C.14	General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]	
C.15	General Reporting Requirements [326 IAC 2-7-5(3)(C)]	
<b>SECTION D.1</b>	<b>FACILITY OPERATION CONDITIONS</b> .....	12
	<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b>	
D.1.1	Operational Limits	
	<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]</b>	
D.1.2	Record Keeping Requirements	
D.1.3	Reporting Requirements	
<b>Certification</b>	.....	13
<b>Monthly Report</b>	.....	14

## SECTION A

## SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Gary Department of Environmental Affairs. The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary oil refinery.

Responsible Official:	Colin MacLean
Source Address:	2815 Indianapolis Boulevard, Whiting, Indiana 46394
Mailing Address:	P.O. Box 710, Whiting, Indiana 46394
General Source Phone Number:	(219) 473-7700
SIC Code:	2911
County Location:	Lake
Source Location Status:	Nonattainment for Ozone, PM-10, and SO <sub>2</sub> Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source is approved to construct and operate the following emission units and pollution control devices:

A connecting pipe between BP Amoco Oil Company - Whiting Refinery's emission units 501 and 503, and Whiting Clean Energy's heat recovery steam operator. The purpose of the connection will be to exchange steam between the two facilities. Emission units 501 and 503 consist of a series of fuel gas, fuel oil and natural gas-fired boilers, constructed in 1990 and with a total maximum capacity of 4,920 MMBtu/hr. The connecting pipe will include a steam flow meter.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

**B.1      Definitions [326 IAC 2-7-1]**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

**B.2      Effective Date of the Permit [IC13-15-5-3]**

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Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

**B.3      Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]**

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

**B.4      Local Agency Requirement**

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An application for an operation permit must be made ninety (90) days before start up to:

Gary Department of Environmental Affairs  
504 N. Broadway, Suite 1012  
Gary, Indiana 46402

The operation permit issued by the Gary Department of Environmental Affairs shall contain as a minimum the conditions in the Operation Conditions section of this permit.

## SECTION C GENERAL OPERATION CONDITIONS

### C.1 Certification ~~[326 IAC 2-7-4(f)]~~~~[326 IAC 2-7-6(1)]~~~~[326 IAC 2-7-5(3)(C)]~~

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

### C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] ~~[326 IAC 1-6-3]~~

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs  
504 N. Broadway, Suite 1012  
Gary, Indiana 46402

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and the Gary Department of Environmental Affairs upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and the Gary Department of Environmental Affairs. IDEM, OAQ, and the Gary Department of Environmental Affairs may require the

Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Gary Department of Environmental Affairs makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the Gary Department of Environmental Affairs within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs  
504 N. Broadway, Suite 1012  
Gary, Indiana 46402

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1]**

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Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM<sub>10</sub> emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, to be submitted to IDEM.

**C.7 Operation of Equipment [326 IAC 2-7-6(6)]**

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Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

**Compliance Requirements [326 IAC 2-1.1-11]**

**C.8 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

#### **C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

#### **C.10 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### **C.11 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

#### **C.12 Emergency Provisions [326 IAC 2-7-16]**

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, the Gary Department of Environmental Affairs, and the Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

and

Gary Department of Environmental Affairs  
504 N. Broadway, Suite 1012  
Gary, Indiana 46402  
(219) 882-3007

and

Northwest Regional Office  
NBD Bank Building  
504 N. Broadway, Suite 418  
Gary, Indiana 46402-1942  
1-888-672-8323

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs  
504 N. Broadway, Suite 1012  
Gary, Indiana 46402

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, and the Gary Department of Environmental Affairs may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and the Gary Department of Environmental Affairs by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### **C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]**

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the Gary Department of Environmental Affairs makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the Gary Department of Environmental Affairs within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### **C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs  
504 N. Broadway, Suite 1012  
Gary, Indiana 46402

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and the Gary Department of Environmental Affairs on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

A connecting pipe between BP Amoco Oil Company - Whiting Refinery's emission units 501 and 503, and Whiting Clean Energy's heat recovery steam operator. The purpose of the connection will be to exchange steam between the two facilities. Emission units 501 and 503 consist of a series of fuel gas, fuel oil and natural gas-fired boilers, constructed in 1990 and with a total maximum capacity of 4,920 MMBtu/hr. The connecting pipe will include a steam flow meter.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Operational Limits

- (a) The maximum amount of steam BP Amoco shall accept from Whiting Clean Energy is 13,200 tons per day. The maximum amount of steam BP Amoco shall supply to Whiting Clean Energy is 8,400 tons per day. In all cases, the net steam flow, over any 365 day period, from Whiting Clean Energy to the BP Amoco Oil Refinery, shall be positive.
- (b) At any time while steam is being accepted to the BP Amoco Oil Refinery from Whiting Clean Energy, BP Amoco shall reduce steam production from Units 501 and 503 by the same amount of steam that is being accepted.

Compliance with these limits makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

#### D.1.2 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain the following records:
  - (1) An average yearly net flow rate, computed on a rolling 365 day basis.
  - (2) A log of the dates and amounts that steam production was reduced for emission Units 501 and 503, when steam was accepted from Whiting Clean Energy.

#### D.1.3 Reporting Requirements

A semi-annual summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION AND  
GARY DEPARTMENT OF ENVIRONMENTAL AFFAIRS**

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: BP Amoco Oil Company - Whiting Refinery  
Source Address: 2815 Indianapolis Blvd., Whiting, Indiana 46394-0710  
Mailing Address: P.O. Box 710, 2815 Indianapolis Blvd., Whiting, Indiana 46394-0710  
Source Modification No.: 089-14239-00003

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION AND GARY DEPARTMENT OF  
 ENVIRONMENTAL AFFAIRS**

**Part 70 Source Modification Monthly Report**

For each semi-annual report, please include six monthly reports

Source Name: BP Amoco Oil Company - Whiting Refinery  
 Source Address: 2815 Indianapolis Blvd., Whiting, Indiana 46394-0710  
 Mailing Address: P.O. Box 710, 2815 Indianapolis Blvd., Whiting, Indiana 46394-0710  
 Source Modification No.: 089-14239-00003  
 Facility: Connection between BP Amoco and Whiting Clean Energy (WCE)  
 Parameter: Net Yearly flow rate calculated on a rolling 365 day basis  
 Limit: Net flow rate must be positive

Month: \_\_\_\_\_ Year: \_\_\_\_\_

Day	Steam supplied to BP Amoco from WCE (tons/day)	Steam supplied to WCE from BP Amoco (tons/day)	Net yearly flow rate	Day			
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.  
 Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
 Title/Position: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Ms. Lori Washington  
BP Amoco Oil Company - Whiting Refinery  
2815 Indianapolis Boulevard  
P.O. Box 710  
Whiting, Indiana 46394-0710

Re: Minor Source Modification No: 089-14239-00003

Dear Ms. Washington:

BP Amoco Oil Company - Whiting Refinery applied for a Part 70 operating permit on September 23, 1996 for an oil refinery. An application to modify the source was received on March 29, 2001. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

A connection between BP Amoco Oil Company's emission units 501 and 503, and Whiting Clean Energy's heat recovery steam generator. Whiting Clean Energy is located on adjacent property. The purpose of the connection will be to exchange steam between the two sources. There will be a steam flow meter on the connection to monitor the steam flow between the two sources.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Kate Huckelbridge, ERG, P.O. Box 2010, Morrisville, North Carolina 27560, or call (919) 468-7902 to speak directly to Ms. Huckelbridge. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
ERG/KH

cc: File - Lake County  
U.S. EPA, Region V  
Lake County Health Department  
Gary Department of Environmental Affairs  
Northwest Regional Office  
Air Compliance Section Inspector - Ramesh Tejuja  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

**Indiana Department of Environmental Management  
Office of Air Quality  
and Gary Department of Environmental Affairs**

**Technical Support Document (TSD) for a Part 70 Minor  
Source Modification**

**Source Background and Description**

Source Name:	Amoco Oil Company - Whiting Refinery
Source Location:	2815 Indianapolis Boulevard, Whiting, Indiana 46394
County:	Lake
SIC Code:	2911
Operation Permit No.:	
Operation Permit Issuance Date:	Pending
Minor Source Modification No.:	089-14239-00003
Permit Reviewer:	ERG/KH

The Office of Air Quality (OAQ) has reviewed a modification application from BP Amoco Oil Company - Whiting Refinery relating to the construction of the following emission units and pollution control devices:

A connecting pipe between BP Amoco Oil Company - Whiting Refinery's emission units 501 and 503, and Whiting Clean Energy's heat recovery steam operator. The purpose of the connection will be to exchange steam between the two facilities. Emission units 501 and 503 consist of a series of fuel gas, fuel oil and natural gas-fired boilers, constructed in 1990 and with a total maximum capacity of 4,920 MMBtu/hr. The connecting pipe will include a steam flow meter.

**Source Definition**

Pursuant to 326 IAC 2-7-2(a)(1), all of the following criteria must be met to consider two plants (Whiting and BP Amoco - Whiting Refinery (Amoco)) as a single major source:

- (a) The two plants must be located on one or more contiguous or adjacent properties;
- (b) The two plants must be under the same common control; and
- (c) The two plants must belong to the same major industrial grouping (same two digits code).

Whiting, a wholly owned subsidiary of Primary Energy, Inc. operates a cogeneration facility on the Amoco plant property located in Whiting, Indiana. The primary purpose of the cogeneration facility is to generate electricity. The principal purpose of the BP Amoco source is to refine petroleum. These two sources are classified under two different major industrial groupings and are therefore considered separate sources.

## History

On March 29, 2001, BP Amoco Oil Company - Whiting Refinery submitted an application to the OAQ requesting to add a connecting pipeline between their source and Whiting Clean Energy, for the purposes of steam exchange. BP Amoco Oil Company - Whiting Refinery submitted an application for a Part 70 permit on September 23, 1996. This permit was still pending at the time of this source modification review. A meeting was held with Alan Davidson of IDEM on February 8, 2001 to discuss this source modification. BP Amoco was told by IDEM that an air permit was not necessary for this project because it involves only the interchange of steam and both BP Amoco and Whiting Clean Energy would continue to operate within their current permit limits. However, BP Amoco was concerned that the project could be viewed as triggering the requirements of Prevention of Significant Deterioration (PSD) and/or Nonattainment New Source Review (NNSR), and were therefore interested in establishing operational constraints as part of a federally enforceable permit that would ensure that PSD and/or NNSR is not triggered. The result is this minor source modification. All other rules and conditions applicable to this source and its facilities are unchanged by this modification.

## Enforcement Issue

There are no enforcement actions pending.

## Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 29, 2001.

## Emission Calculations

Emission calculations are unnecessary for this modification.

## Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0
PM-10	0
SO <sub>2</sub>	0
VOC	0
CO	0
NO <sub>x</sub>	0

HAP's	Potential To Emit (tons/year)
Single HAP	0
TOTAL	0

**Justification for Modification**

The Part 70 Operating permit is being modified through a Part 70 (Minor or Significant) Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(3) for modifications involving a pollution prevention project that does not increase the potential to emit of any regulated pollutant greater than the thresholds in 326 IAC 2-7-10.5(d)(4). This project is considered a pollution prevention project because it will reduce the creation of pollutants through increased efficiency of the use of steam generated at Whiting Clean Energy and BP Amoco. By accepting steam from Whiting Clean Energy, BP Amoco will utilize their boilers less resulting in a net decrease of emissions. In the worst-case scenario, BP Amoco will operate their boilers the same amount, resulting in no change to the potential to emit. The worst case scenario is reflected in the potential to emit table.

**County Attainment Status**

The source is located in Lake County.

Pollutant	Status
PM-10	moderate nonattainment
SO <sub>2</sub>	primary nonattainment
NO <sub>2</sub>	attainment
Ozone	severe nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Lake County has been classified as nonattainment for ozone, PM-10, and SO<sub>2</sub>. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (c) This source is part of the area in Lake County designated as primary nonattainment for SO<sub>2</sub>.

**Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

**State Rule Applicability - Individual Facilities**

326 IAC 2-2 (Prevention of Significant Deterioration)

This modification is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)). In order to prove that this modification was exempt from PSD, it had to be

shown that by increasing the potential amount of steam available to BP Amoco, there was no resulting debottlenecking in any other processes at the plant. According to BP Amoco, there are other bottlenecks throughout the system, and as a result, increasing the amount of steam available will have no effect on operations or emissions from other units at the Refinery. Therefore, debottlenecking is not an issue. In addition, in order for this modification to be exempt from PSD, it also had to be shown that this modification did not increase the utilization of the existing emission units 501 and 503. To address this issue, two operational limits have been placed on this operation. The first is that the annual net flow of steam from Whiting Clean Energy to the Refinery must be positive. In other words, the Refinery must receive more steam from Whiting Clean Energy than it provides. The second condition requires that when the Refinery is receiving steam from Whiting Clean Energy, it must reduce the amount of steam it is producing by the same amount. These two conditions will ensure that the utilization of units 501 and 503 are not increased by constructing the steam exchange pipe. Based on the fact that there is no debottlenecking of the process or increased utilization of existing emission units as a result of this modification, the requirements of PSD are not applicable.

### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

### **Conclusion**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 089-14239-00003.